



Amendments to the Specification:

[0025] Figure 5 illustrates a first embodiment of the present invention. In this embodiment, the flow area of the first passageway 62-162 on the valve spool 42-142 is appropriately sized to reduce hydraulic fluid flow from the head end port 30 of the hydraulic cylinder 16 to the hydraulic fluid reservoir 18, such that a sufficient proportion of the hydraulic fluid expelled from the head end port 30 flows through the supply passage 54-154 of the control valve 14 and back to the rod end port 26 to reduce cavitation when the valve spool 42-142 is in the "float" position. For example, the first passageway 62-162 may be sized such that the ratio of flow through the second return port 52 compared with the flow through the second work port 48 is approximately the ratio of the square of the rod cylinder 22 diameter to the square of the cylinder body 20 diameter.

[0026] Figure 6 illustrates a second embodiment of the present invention. In this embodiment, the second passageway 68-268 on the valve spool 42-242 is blocked-off, eliminating the flow path for hydraulic fluid to flow between the hydraulic fluid reservoir 18 and the rod end port 26 of the hydraulic cylinder 16 when the valve spool 42-242 is in the "float" position. Additionally, the flow area of first passageway 62-262 on the valve spool 42 is appropriately sized to reduce hydraulic fluid flow from the head end port 30 of the hydraulic cylinder 16 to the hydraulic fluid reservoir 18, such that a sufficient proportion of the hydraulic fluid expelled from the head end port 30 flows through the supply passage 54-254 of the control valve 14 and back to the rod end port 26 with minimal cavitation when the valve spool 42-242 is in the "float" position.